## Abstract of the Disclosure

A method for killing malignant brain tumor cells in vivo entails providing replication competent herpes simplex virus vectors to tumor cells. A replication competent herpes simplex virus vector, with defective expression of the  $\gamma 34.5$  gene and the ribonucleotide reductase gene, specifically destroys tumor cells, is hypersensitive to anti-viral agents, and yet is not neurovirulent.